ELSEVIER

Nuclear Instruments and Methods in Physics Research B 94 (1994) 605–613

NIM B
Beam Interactions with Materials & Atoms

Author index

Abbe, J.-C., see Pignol, J.-P. . . . 94 (1994) 516
Abdel-Wahab, M.S., see El-Fiki, S.A. . . . 94 (1994) 91
Abramchuk, N.M., see Kholmetskii, A.L. . . . 94 (1994) 493
Abu Al Azm, S.M., see Skuratov, V.A. . . . 94 (1994) 480
Ahmad, S., see Qayyum, A. . . . 94 (1994) 597
Ahmed, E., see Zegadi, A. . . . 94 (1994) 429
Alberts, W.G., see Savvidis, E. . . . 94 (1994) 325
Almási, I., see Sáfár, J. . . . 94 (1994) 537
Als-Nielsen, J., A.K. Freund, G. Grübel, J. Linderholm, M. Nielsen, M. Sanchez del Rio and J.P.F. Sellschop, Multiple station beamline at an undulator X-ray source . . . 94 (1994) 306
Als-Nielsen, J., A.K. Freund, M. Wulff, M. Hanfland and D. Häusermann, Performance of diamond as X-ray monochromator under very high heat flux in a synchrotron beam (*Letter to the Editor*) . . . 94 (1994) 348
Andersson, M., see El Bouanani, M. . . . 94 (1994) 530
Andreo, P., see Tabata, T. . . . 94 (1994) 103
Antipov, A.V., G.I. Britvich, V.G. Vasil'chenko and A.A. Chumakov, Precise densitometer for thin-film dosimeters . . . 94 (1994) 338
Anwar, S., see Zegadi, A. . . . 94 (1994) 429
Apell, S.P., Corrections to the image potential for ions . . . 94 (1994) 27
Ärje, J., see Koivisto, H. . . . 94 (1994) 291
Armbruster, P., see Magel, A. . . . 94 (1994) 548
Aumann, T., see Magel, A. . . . 94 (1994) 548

Backfrieder, W., see Gurker, N. . . . 94 (1994) 154
Badavi, F.F., see Wilson, J.W. . . . 94 (1994) 95
Bakharev, O.G., see Pogrebnjak, A.D. . . . 94 (1994) 81
Balashova, L.L., see Trikalinos, Ch. . . . 94 (1994) 218
Baltenkov, A.S., V.Kh. Ferleger, M.V. Medvedeva and I.A. Wojciechowski, Non-additive effects in ion–photon emission . . . 94 (1994) 59
Baragiola, R.A. (*Book Review*: Fundamental Processes in Sputtering of Atoms and Molecules (SPUT 92), by P. Sigmund) . . . 94 (1994) 353
Barnes, P., see Brown, S.D. . . . 94 (1994) 417
Barradas, N.P., J.C. Soares, M.F. da Silva, F. Pászti and E. Szilágyi, Study of multilayer substrate surface roughness using RBS with improved depth resolution . . . 94 (1994) 266
Barros Leite, C.V., see Kaercher, R.G. . . . 94 (1994) 207
Baudin, K., A. Brunelle, M. Chabot, S. Della-Negra, J. Depauw, D. Gardès, P. Håkansson, Y. Le Beyec, A. Billebaud, M. Fallavier, J. Remillieux, J.C. Poizat and J.P. Thomas, Energy loss by MeV carbon clusters and fullerene ions in solids (*Letter to the Editor*) . . . 94 (1994) 341
Belattar, A., see Zegadi, A. . . . 94 (1994) 429
Ben-Itzhak, I., see Gertner, I. . . . 94 (1994) 47
Benazeth, C., P. Benoit-Cattin, P. Cafarelli, P. Reynes, J.P. Ziesel and N. Benazeth, An apparatus for ion–surface collisional process studies and surface analysis . . . 94 (1994) 581
Benazeth, N., see Benazeth, C. . . . 94 (1994) 581
Benenson, R.E., see Berning, P.R. . . . 94 (1994) 130
Benoit-Cattin, P., see Benazeth, C. . . . 94 (1994) 581
Bernas, M., see Magel, A. . . . 94 (1994) 548
Berning, P.R. and R.E. Benenson, An ERD based study of the electromigration of hydrogen in V, Ta, Nb, and Ti . . . 94 (1994) 130
Bhatia, K.L., P. Singh, M. Singh, N. Kishore, N.C. Mehra and D. Kanjilal, Optical study of MeV energy heavy ion-induced effects in crystalline germanium and silicon . . . 94 (1994) 379
Bibicu, I., M.S. Rogalski and G. Nicolescu, Toroidal proportional detector for conversion X-ray and transmission Mössbauer spectroscopy . . . 94 (1994) 330
Billebaud, A., see Baudin, K. . . . 94 (1994) 341
Biri, S., see Vámosi, J. . . . 94 (1994) 297
Blank, B., see Magel, A. . . . 94 (1994) 548

0168-583X/94/$07.00 © 1994 Elsevier Science B.V. All rights reserved

Bochsler, P., see Gonin, M. 94 (1994) 15
Bogdanović, I., see Fazinić, S. 94 (1994) 363
Bourdelle, K.K., see Khodyrev, V.A. 94 (1994) 523
Britvich, G.I., see Antipov, A.V. 94 (1994) 338
Brohm, T., see Magel, A. 94 (1994) 548
Brown, S.D., R.S. Lowther-Harris, P.W. Haycock, J.F. Kelly, P.J. Chandler, P. Barnes and M.E. Unwin, Dislocation distributions in ion implanted optical waveguides 94 (1994) 417
Brunelle, A., see Baudin, K. 94 (1994) 341
Brusa, R., see Pogrebnjak, A.D. 94 (1994) 81
Bubb, I.F., see El Bouanani, M. 94 (1994) 530

Cafarelli, P., see Benazeth, C. 94 (1994) 581
Calaway, W.F., see Ma, Z. 94 (1994) 197
Campbell, J.L., see Maxwell, J.A. 94 (1994) 172
Chabot, M., see Baudin, K. 94 (1994) 341
Chandler, P.J., see Brown, S.D. 94 (1994) 417
Chelyadinskii, A.R., see Varichenko, V.S. 94 (1994) 240
Chibani, O. and J.P. Patau, New electron multiple scattering distributions for Monte Carlo transport simulation 94 (1994) 1
Choi, I.S., see Lee, Y.S. 94 (1994) 66
Choi, S.C., see Lee, Y.S. 94 (1994) 66
Chumakov, A.A., see Antipov, A.V. 94 (1994) 338
Chumanov, V.Ya., see Khodyrev, V.A. 94 (1994) 523
Chun, S.Y., see Wilson, J.W. 94 (1994) 95
Clerc, H.-G., see Magel, A. 94 (1994) 548
Cohen, D.D., see Martin, J.W. 94 (1994) 277
Cohen, D.D., see El Bouanani, M. 94 (1994) 530
Czajkowski, S., see Magel, A. 94 (1994) 548

da Silva, M.F., see Barradas, N.P. 94 (1994) 266
da Silveira, E.F., see Kaercher, R.G. 94 (1994) 207
de Jong, M., see Magel, A. 94 (1994) 548
Della-Negra, S., see Baudin, K. 94 (1994) 341
Depauw, J., see Baudin, K. 94 (1994) 341
de Souza Jr., P.A., see Salles, E.O.T. 94 (1994) 499
Dhal, B.B. and H.C. Padhi, Relative L-shell X-ray intensities of Pt, Pb and Bi following ionization by 59.54 keV γ-rays 94 (1994) 373
Didyk, A.Yu., see Skuratov, V.A. 94 (1994) 480
Döbeli, M., R.M. Ender, U.S. Fischer, M. Suter, H.A. Synal and D. Vetterli, Damage production in Si by MeV carbon cluster irradiation 94 (1994) 388
Domres, R., see Varichenko, V.S. 94 (1994) 240
Drake, D.M., see Drosg, M. 94 (1994) 319
Drosg, M., D.M. Drake and J. Masarik, Calibration of a Li-glass detector for neutron energies above 50 keV by the $^{1}H(t,n)^{3}He$ reaction 94 (1994) 319
Durante, M., G.F. Grossi, M. Pugliese, L. Manti, M. Nappo and G. Gialanella, Single charged-particle damage to living cells: a new method based on track-etch detectors 94 (1994) 251
Dytlewski, N., see Martin, J.W. 94 (1994) 277
Dytlewski, N., see El Bouanani, M. 94 (1994) 530

Eckstein, W., see Mayer, M. 94 (1994) 22
El-Faramawy, N., see El-Fiki, S.A. 94 (1994) 91
El-Fiki, M.A., see El-Fiki, S.A. 94 (1994) 91
El-Fiki, S.A., M.S. Abdel-Wahab, N. El-Faramawy and M.A. El-Fiki, Dating of ancient Egyptian pottery using the thermoluminescence technique 94 (1994) 91
El Bouanani, M., M. Hult, L. Persson, E. Swietlicki, M. Andersson, M. Östling, N. Lundberg, C. Zaring, D.D. Cohen, N. Dytlewski, P.N. Johnston, S.R. Walker, I.F. Bubb and H.J. Whitlow, Multivariate analysis method for energy calibration and improved mass assignment in recoil spectrometry 94 (1994) 530
Ender, R.M., see Döbeli, M. 94 (1994) 388
Erchak, D.P., see Varichenko, V.S. 94 (1994) 240
Erchak, D.P., see Varichenko, V.S. 94 (1994) 259

Fahrner, W.R., see Varichenko, V.S. . . . 94 (1994) 259
Fallavier, M., see Baudin, K. . . . 94 (1994) 341
Faunce, C.A., see Zegadi, A. . . . 94 (1994) 429
Fazinić, S., I. Bogdanović, M. Jakšić, I. Orlić and V. Valković, L-shell X-ray production cross sections of Tb, Dy, Ho, Er, Tm, Yb, and Lu for protons of energy 2–6 MeV . . . 94 (1994) 363
Feng, Y., Z. Zhou, G. Zhao and F. Yang, Cross sections for 165° backscattering of 2.0–9.0 MeV ^{4}He ions from nitrogen . . . 94 (1994) 11
Ferleger, V.Kh., see Baltenkov, A.S. . . . 94 (1994) 59
Fischer, U.S., see Döbeli, M. . . . 94 (1994) 388
Flores-Llamas, H., Chebyshev approximations for the transmission integral for one single line in Mössbauer spectroscopy . . . 94 (1994) 485
Folger, H., see Magel, A. . . . 94 (1994) 548
Frenken, J.W.M., see Zagwijn, P.M. . . . 94 (1994) 137
Freund, A.K., see Als-Nielsen, J. . . . 94 (1994) 306
Freund, A.K., see Als-Nielsen, J. . . . 94 (1994) 348
Fricke, B., see Kürpick, P. . . . 94 (1994) 183
Furetta, C., see Kitis, G. . . . 94 (1994) 441

Gaiduk, P.I., F.F. Komarov, A. Witzmann, A. Zentgraf and S. Schippel, Effect of Kr^+-mixing and thermal treatment on Co-silicide formation . . . 94 (1994) 231
Gann, V.V., see Makletsov, A.A. . . . 94 (1994) 203
Gardès, D., see Baudin, K. . . . 94 (1994) 341
Garg, V.K., see Salles, E.O.T. . . . 94 (1994) 499
Garton, D.B., see Martin, J.W. . . . 94 (1994) 277
Geissel, H., see Magel, A. . . . 94 (1994) 548
Gertner, I., B. Rosner and I. Ben-Itzhak, Methods for measuring mean lifetimes of long lived molecular ions formed in fast collisions . . . 94 (1994) 47
Gialanella, G., see Durante, M. . . . 94 (1994) 251
Golser, R., see Semrad, D. . . . 94 (1994) 592
Gonin, M., R. Kallenbach and P. Bochsler, Charge exchange of atoms with high first ionization potentials in carbon foils at $E \lesssim 35$ keV/u . . . 94 (1994) 15
Grewe, A., see Magel, A. . . . 94 (1994) 548
Grossi, G.F., see Durante, M. . . . 94 (1994) 251
Grübel, G., see Als-Nielsen, J. . . . 94 (1994) 306
Gubbens, P.C.M., see Moolenaar, A.A. . . . 94 (1994) 555
Gurker, N., R. Nell, W. Backfrieder, J. Kandutsch, K. Sarg, S. Prevrhal and C. Nentwich, X-ray microtomography experiments using a diffraction tube and a focusing multilayer-mirror . . . 94 (1994) 154

Hafez, A.F. and G.I. Khalil, Track-hole formation of alpha-particle and recoil nuclei in an LR-115 nuclear track detector exposed to neutrons . . . 94 (1994) 107
Håkansson, P., see Baudin, K. . . . 94 (1994) 341
Haneda, H., see Sakaguchi, I. . . . 94 (1994) 411
Hanelt, E., see Magel, A. . . . 94 (1994) 548
Hanfland, M., see Als-Nielsen, J. . . . 94 (1994) 348
Häusermann, D., see Als-Nielsen, J. . . . 94 (1994) 348
Haycock, P.W., see Brown, S.D. . . . 94 (1994) 417
He, Y.D. and M. Solarz, Sensitivity of BP-1 glass detectors etched in methanesulfonic acid . . . 94 (1994) 113
Heinz, A., see Magel, A. . . . 94 (1994) 548
Herpers, U., see Mathew, K.J. . . . 94 (1994) 449
Hibbs, M.R., see Jarvis, V.M. . . . 94 (1994) 404
Hill, A.E., see Zegadi, A. . . . 94 (1994) 429
Hishita, S., see Sakaguchi, I. . . . 94 (1994) 411
Hjörvarsson, B., see Ólafsson, S. . . . 94 (1994) 345
Hong, C.E., see Lee, Y.S. . . . 94 (1994) 66
Hou, M.D., see Xiong, H.Q. . . . 94 (1994) 475
Hsia, Y.F., see Xiong, H.Q. . . . 94 (1994) 475
Hult, M., see El Bouanani, M. . . . 94 (1994) 530

Imanich, M., see Zegadi, A. . . . 94 (1994) 429
Irnich, H., see Magel, A. . . . 94 (1994) 548
Ito, R., see Tabata, T. . . . 94 (1994) 103

Jakšić, M., see Fazinić, S. 94 (1994) 363
Jarvis, V.M., M.R. Hibbs and T.F. Moran, Evaporative processes of sputtered alkali halide cluster ions 94 (1994) 404
Jeong, K., see Lee, Y.S. 94 (1994) 66
Jin, Y.F., see Xiong, H.Q. 94 (1994) 475
Johnson, E. (*Book Review*: Handbook of Ion Implantation Technology, by J.F. Ziegler) 94 (1994) 341
Johnston, P.N., see El Bouanani, M. 94 (1994) 530
Junghans, A., see Magel, A. 94 (1994) 548

Kabachnik, N.M., see Trikalinos, Ch. 94 (1994) 218
Kaercher, R.G., E.F. da Silveira, C.V. Barros Leite and E.A. Schweikert, Simultaneous detection of secondary ions and photons produced by the impact of keV polyatomic ions 94 (1994) 207
Kallenbach, R., see Gonin, M. 94 (1994) 15
Kanda, K., see Sakurai, Y. 94 (1994) 433
Kandutsch, J., see Gurker, N. 94 (1994) 154
Kanjilal, D., see Bhatia, K.L. 94 (1994) 379
Kasytchits, N.M., see Varichenko, V.S. 94 (1994) 259
Katardjiev, I.V., see Verhoeven, J. 94 (1994) 395
Kelly, J.F., see Brown, S.D. 94 (1994) 417
Keppel, A., see Verhoeven, J. 94 (1994) 395
Khalil, G.I., see Hafez, A.F. 94 (1994) 107
Khodyrev, V.A., V.Ya. Chumanov, K.K. Bourdelle and G.P. Pokhil, Monte Carlo simulation of ion-beam channeling in $YBa_2Cu_3O_7$ 94 (1994) 523
Kholmetskii, A.L., O.V. Misevich, N.M. Abramchuk and S.M. Leshkov, Mössbauer concentratometry as a new analytical method 94 (1994) 493
Kim, K.W., see Lee, Y.S. 94 (1994) 66
Kishore, N., see Bhatia, K.L. 94 (1994) 379
Kitis, G. and C. Furetta, Thermoluminescence dosimetric characteristics of monocrystalline LiF:Mg,Ti (DTG-4) . . . 94 (1994) 441
Kobayashi, N., see Okuda, S. 94 (1994) 227
Kobayashi, T., see Sakurai, Y. 94 (1994) 433
Koivisto, H., J. Ärje and M. Nurmia, Metal ion beams from an ECR ion source using volatile compounds 94 (1994) 291
Komarov, F.F., see Gaiduk, P.I. 94 (1994) 231
Komarov, F.F., V.V. Pilko, V.A. Yakushev and V.S. Tishkov, Super-hard cubic BN layer formation by nitrogen ion implantation 94 (1994) 237
Konobeyev, A.Yu. and Yu. A.. Korovin, Semi-empirical systematics of (n,p) reaction excitation functions 94 (1994) 119
Korovin, Yu. A.., see Konobeyev, A.Yu. 94 (1994) 119
Kraan, W.H., see Schebetov, A.F. 94 (1994) 575
Kristiansson, P., see Sjöland, K.A. 94 (1994) 333
Kürpick, P., W.-D. Sepp, H.J. Lüdde and B. Fricke, Solution of the time dependent Dirac–Fock–Slater equation for many-electron collisions systems using a time window method 94 (1994) 183

Lakosi, L., see Sáfár, J. 94 (1994) 537
Le Beyec, Y., see Baudin, K. 94 (1994) 341
Lee, Y.S., K.W. Kim, S.C. Choi, C.E. Hong, I.S. Choi, K. Jeong and C.N. Whang, Characteristics of polyimide film deposited by ionized cluster beam 94 (1994) 66
Leshkov, S.M., see Kholmetskii, A.L. 94 (1994) 493
Li, C.L., see Xiong, H.Q. 94 (1994) 475
Linderholm, J., see Als-Nielsen, J. 94 (1994) 306
Lindner, J.K.N., see Varichenko, V.S. 94 (1994) 240
Lowther-Harris, R.S., see Brown, S.D. 94 (1994) 417
Lüdde, H.J., see Kürpick, P. 94 (1994) 183
Lundberg, N., see El Bouanani, M. 94 (1994) 530
Luszik-Bhadra, M., see Savvidis, E. 94 (1994) 325

Ma, F., see Xiong, H.Q. 94 (1994) 475
Ma, Z., W.F. Calaway, M.J. Pellin and E.I. von Nagy-Felsobuki, Kinetic energy distributions of sputtered indium atoms and clusters 94 (1994) 197
Magel, A., H. Geissel, B. Voss, P. Armbruster, T. Aumann, M. Bernas, B. Blank, T. Brohm, H.-G. Clerc, S. Czajkowski, H. Folger, A. Grewe, E. Hanelt, A. Heinz, H. Irnich, M. de Jong, A. Junghans, F. Nickel, M. Pfützner, A. Piechaczek, C. Röhl, C. Scheidenberger, K.-H. Schmidt, W. Schwab, S. Steinhäuser, K. Sümmerer, W. Trinder, H. Wollnik and G. Münzenberg, First spatial isotopic separation of relativistic uranium projectile fragments 94 (1994) 548

Makletsov, A.A., A.E. Petrov and V.V. Gann, Evaluation of the displacement energy of Gd atoms in $GdBa_2Cu_3O_{7-\delta}$ from experimental data 94 (1994) 203
Manić, S., see Novković, D. 94 (1994) 369
Manti, L., see Durante, M. 94 (1994) 251
Mariscotti, M.A.J., see Tarela, P.A. 94 (1994) 511
Martin, J.W., D.D. Cohen, N. Dytlewski, D.B. Garton, H.J. Whitlow and G.J. Russell, Materials characterisation using heavy ion elastic recoil time of flight spectrometry 94 (1994) 277
Martinovitsh, V.A., see Varichenko, V.S. 94 (1994) 240
Martynenko, V.A., see Pogrebnjak, A.D. 94 (1994) 81
Masarik, J., see Drosg, M. 94 (1994) 319
Mathew, K.J., M.N. Rao, H.W. Weber, U. Herpers and R. Michel, Xenon production cross sections at intermediate energies and production rates in small meteoroids based on simulation experiments 94 (1994) 449
Maxwell, J.A., W.J. Teesdale and J.L. Campbell, Compensation schemes for peak-tailing uncertainties in PIXE spectra, using the GUPIX code 94 (1994) 172
Mayer, M. and W. Eckstein, Monte Carlo calculations of hydrogen and deuterium range distributions in light target materials 94 (1994) 22
McLaughlin, W.L., see Spindel, A. 94 (1994) 150
Medvedeva, M.V., see Baltenkov, A.S. 94 (1994) 59
Mehra, N.C., see Bhatia, K.L. 94 (1994) 379
Melnikov, A.A., see Varichenko, V.S. 94 (1994) 259
Michel, R., see Mathew, K.J. 94 (1994) 449
Mikhailova, V.E., see Schebetov, A.F. 94 (1994) 575
Milošević, Z., see Novković, D. 94 (1994) 369
Misevich, O.V., see Kholmetskii, A.L. 94 (1994) 493
Molenbroek, A.M., see Zagwijn, P.M. 94 (1994) 137
Moolenaar, A.A., P.C.M. Gubbens and J.J. van Loef, The current integrating technique applied to ^{141}Pr Mössbauer spectroscopy 94 (1994) 555
Moran, T.F., see Jarvis, V.M. 94 (1994) 404
Mori, H. and T. Sakata, High resolution electron microscopy study on crystallization of gold-implanted amorphous SiC 94 (1994) 73
Münzenberg, G., see Magel, A. 94 (1994) 548

Nagy, I., Low-velocity antiproton stopping power. A trial-potential approach 94 (1994) 377
Nappo, M., see Durante, M. 94 (1994) 251
Nell, R., see Gurker, N. 94 (1994) 154
Nentwich, C., see Gurker, N. 94 (1994) 154
Nickel, F., see Magel, A. 94 (1994) 548
Nicolescu, G., see Bibicu, I. 94 (1994) 330
Nielsen, M., see Als-Nielsen, J. 94 (1994) 306
Nishide, Y., Y. Sasa and M. Uda, PIXE-induced XRF analysis for trace amounts of Mn, Cr, V and Ti in low-alloy steels 94 (1994) 271
Novković, D., K. Subotić, Z. Milošević, S. Manić and M. Stojanović, An energy loss straggling formula 94 (1994) 369
Nurmia, M., see Koivisto, H. 94 (1994) 291

Oechsner, R., see Pogrebnjak, A.D. 94 (1994) 81
Ohashi, K., see Okuda, S. 94 (1994) 227
Okuda, S., K. Ohashi and N. Kobayashi, Effects of electron-beam and γ-ray irradiation on the magnetic flux of Nd–Fe–B and Sm–Co permanent magnets 94 (1994) 227
Ólafsson, S., B. Hjörvarsson and F. Stillesjö, On the near surface yield of the $^1H(^{15}N,\alpha\gamma)^{12}C$ nuclear reaction and initial charge state equilibration (*Letter to the Editor*) 94 (1994) 345
Orlić, I., see Fazinić, S. 94 (1994) 363
Östling, M., see El Bouanani, M. 94 (1994) 530
Overett, T., see Spindel, A. 94 (1994) 150

Padhi, H.C., see Dhal, B.B. 94 (1994) 373
Passage, G., see Ruskov, T. 94 (1994) 565
Pászti, F., see Barradas, N.P. 94 (1994) 266
Patau, J.P., see Chibani, O. 94 (1994) 1
Peisach, M., C.A. Pineda, A.E. Pillay and K.A. Springhorn, Time variation of abnormal PIXE yields from some insulating binary metal fluorides under proton bombardment 94 (1994) 540
Peisach, M., see Pillay, A.E. 94 (1994) 545

Pellin, M.J., see Ma, Z. 94 (1994) 197
Penina, N.M., see Varichenko, V.S. 94 (1994) 240
Penina, N.M., see Varichenko, V.S. 94 (1994) 259
Perone, E.A., see Tarela, P.A. 94 (1994) 511
Persson, L., see El Bouanani, M. 94 (1994) 530
Peskov, B.G., see Schebetov, A.F. 94 (1994) 575
Petrov, A.E., see Makletsov, A.A. 94 (1994) 203
Pfützner, M., see Magel, A. 94 (1994) 548
Piechaczek, A., see Magel, A. 94 (1994) 548
Pignol, J.-P., J.-C. Abbe, M. Thellier and A. Stampfler, Neutron capture radiography applied to the investigation of boron-10 biodistribution in animals: improvements in techniques of imaging and quantitative analysis 94 (1994) 516
Pilko, V.V., see Komarov, F.F. 94 (1994) 237
Pillay, A.E., see Peisach, M. 94 (1994) 540
Pillay, A.E. and M. Peisach, $^{14}N^{+}$, $^{16}O^{+}$, and $^{20}Ne^{+}$ ion beams for studies of charge-induced X-ray yields 94 (1994) 545
Pineda, C.A., see Peisach, M. 94 (1994) 540
Pleshanov, N.K., see Schebetov, A.F. 94 (1994) 575
Pogrebnjak, A.D., O.G. Bakharev, V.A. Martynenko, V.A. Rudenko, R. Brusa, A. Zecca, R. Oechsner, H. Ryssel, I.A. Tikhomirov and A.I. Ryabchikov, High dose and intense implantation of the multiply charged ions Al^{+n}, Ti^{+n} and C^{+n} into alfa-iron 94 (1994) 81
Poizat, J.C., see Baudin, K. 94 (1994) 341
Pokhil, G.P., see Khodyrev, V.A. 94 (1994) 523
Por, P.T., see Schebetov, A.F. 94 (1994) 575
Preusse, W. and S. Unterricker, The contribution of cosmic ray muons to the background spectrum of gamma ray spectrometers 94 (1994) 569
Prevrhal, S., see Gurker, N. 94 (1994) 154
Pugliese, M., see Durante, M. 94 (1994) 251
Pusenkov, V.M., see Schebetov, A.F. 94 (1994) 575

Qayyum, A. and S. Ahmad, A magnetically confined hollow cathode duoplasmatron for the PINSTECH ion implanter (*Letter to the Editor*) 94 (1994) 597
Quan, J.M., see Xiong, H.Q. 94 (1994) 475

Radev, R., see Ruskov, T. 94 (1994) 565
Räisänen, J., see Rauhala, E. 94 (1994) 245
Rao, M.N., see Mathew, K.J. 94 (1994) 449
Rastanawi, A., see Ruskov, T. 94 (1994) 565
Rauhala, E. and J. Räisänen, Exfoliation of GaAs caused by MeV ^{1}H and ^{4}He ion implantation at ⟨100⟩, ⟨110⟩ axial and random orientations 94 (1994) 245
Rekveldt, M.Th., see Schebetov, A.F. 94 (1994) 575
Remillieux, J., see Baudin, K. 94 (1994) 341
Reynes, P., see Benazeth, C. 94 (1994) 581
Rogalski, M.S., see Bibicu, I. 94 (1994) 330
Röhl, C., see Magel, A. 94 (1994) 548
Rosner, B., see Gertner, I. 94 (1994) 47
Rudenko, V.A., see Pogrebnjak, A.D. 94 (1994) 81
Ruskov, T., G. Passage, A. Rastanawi and R. Radev, Low-temperature system for simultaneous counting of conversion electrons and backscattered γ-rays in Mössbauer effect experiment 94 (1994) 565
Russell, G.J., see Martin, J.W. 94 (1994) 277
Ruwiel, G.J., see Zagwijn, P.M. 94 (1994) 137
Ryabchikov, A.I., see Pogrebnjak, A.D. 94 (1994) 81
Ryssel, H., see Pogrebnjak, A.D. 94 (1994) 81

Sáfár, J., I. Almási and L. Lakosi, Estimating plutonium buildup from the $^{137}Cs/^{238}U$ ratio for slightly irradiated low enriched uranium 94 (1994) 537
Sakaguchi, I., H. Haneda, S. Hishita, A. Watanabe and J. Tanaka, Oxygen diffusion in ion-implanted layer of Nb-doped $SrTiO_3$ 94 (1994) 411
Sakata, T., see Mori, H. 94 (1994) 73
Sakurai, Y., T. Kobayashi and K. Kanda, Hyper-thermal neutron irradiation field for neutron capture therapy 94 (1994) 433
Salles, E.O.T., P.A. de Souza Jr. and V.K. Garg, Artificial neural network for identification of a substance from a Mössbauer data bank 94 (1994) 499

Sanchez del Rio, M., see Als-Nielsen, J. . . . 94 (1994) 306
Sarg, K., see Gurker, N. . . . 94 (1994) 154
Sasa, Y., see Nishide, Y. . . . 94 (1994) 271
Savvidis, E., W.G. Alberts, M. Luszik-Bhadra and M. Zamani, A passive neutron dosemeter based on a CR-39 track detector with multi-field evaluation . . . 94 (1994) 325
Schebetov, A.F., N.K. Pleshanov, V.M. Pusenkov, B.G. Peskov, G.E. Shmelev, W.H. Kraan, P.T. Por, M.Th. Rekveldt and V.E. Mikhailova, Construction and testing of a multichannel polariser for thermal neutrons . . . 94 (1994) 575
Scheidenberger, C., see Magel, A. . . . 94 (1994) 548
Schippel, S., see Gaiduk, P.I. . . . 94 (1994) 231
Schlatmann, R., see Verhoeven, J. . . . 94 (1994) 395
Schmidt, K.-H., see Magel, A. . . . 94 (1994) 548
Schwab, W., see Magel, A. . . . 94 (1994) 548
Schweikert, E.A., see Kaercher, R.G. . . . 94 (1994) 207
Sellschop, J.P.F., see Als-Nielsen, J. . . . 94 (1994) 306
Semrad, D., R. Golser and E. Steinbauer, A new method to measure the velocity dependence of electronic stopping for low velocity hydrogen projectiles . . . 94 (1994) 592
Sepp, W.-D., see Kürpick, P. . . . 94 (1994) 183
Shapiro, M.H. and T.A. Tombrello, Molecular dynamics simulations of inelastic energy loss effects in sputtering II . . 94 (1994) 186
Shinn, J.L., see Wilson, J.W. . . . 94 (1994) 95
Shmelev, G.E., see Schebetov, A.F. . . . 94 (1994) 575
Shulga, V.I., see Trikalinos, Ch. . . . 94 (1994) 218
Singh, M., see Bhatia, K.L. . . . 94 (1994) 379
Singh, P., see Bhatia, K.L. . . . 94 (1994) 379
Sjöland, K.A. and P. Kristiansson, Pile-up and defective pulse rejection by pulse shape discrimination in surface barrier detectors . . . 94 (1994) 333
Skuratov, V.A., A.Yu. Didyk and S.M. Abu Al Azm, High-energy ionoluminescence of LiF . . . 94 (1994) 480
Slifkin, M.A., see Zegadi, A. . . . 94 (1994) 429
Smulders, P.J.M., The nuclear encounter probability (*Letter to the Editor*) . . . 94 (1994) 595
Soares, J.C., see Barradas, N.P. . . . 94 (1994) 266
Solarz, M., see He, Y.D. . . . 94 (1994) 113
Spindel, A., M.L. Tupper, W.L. McLaughlin, H.L. Whitaker and T. Overett, Calibration of dosimeters for the cryogenic irradiation of composite materials using an electron beam . . . 94 (1994) 150
Springhorn, K.A., see Peisach, M. . . . 94 (1994) 540
Stampfler, A., see Pignol, J.-P. . . . 94 (1994) 516
Steinbauer, E., see Semrad, D. . . . 94 (1994) 592
Steinhäuser, S., see Magel, A. . . . 94 (1994) 548
Stillesjö, F., see Ólafsson, S. . . . 94 (1994) 345
Stojanović, M., see Novković, D. . . . 94 (1994) 369
Subotić, K., see Novković, D. . . . 94 (1994) 369
Sümmerer, K., see Magel, A. . . . 94 (1994) 548
Sun, Y.M., see Xiong, H.Q. . . . 94 (1994) 475
Suter, M., see Döbeli, M. . . . 94 (1994) 388
Swietlicki, E., see El Bouanani, M. . . . 94 (1994) 530
Synal, H.A., see Döbeli, M. . . . 94 (1994) 388
Szilágyi, E., see Barradas, N.P. . . . 94 (1994) 266

Tabata, T., P. Andreo and R. Ito, Depth profile of charge deposition by 0.1- to 100-MeV electrons in elemental absorbers . . . 94 (1994) 103
Tanaka, J., see Sakaguchi, I. . . . 94 (1994) 411
Tarela, P.A., M.A.J. Mariscotti and E.A. Perone, Method for measuring low activity extensive samples . . . 94 (1994) 511
Teesdale, W.J., see Maxwell, J.A. . . . 94 (1994) 172
ter Beek, J., see Zagwijn, P.M. . . . 94 (1994) 137
ter Horst, J., see Zagwijn, P.M. . . . 94 (1994) 137
Thellier, M., see Pignol, J.-P. . . . 94 (1994) 516
Thomas, J.P., see Baudin, K. . . . 94 (1994) 341
Tikhomirov, I.A., see Pogrebnjak, A.D. . . . 94 (1994) 81
Tishkov, V.S., see Komarov, F.F. . . . 94 (1994) 237
Tombrello, T.A., see Shapiro, M.H. . . . 94 (1994) 186
Tombrello, T.A., Predicting latent track dimensions . . . 94 (1994) 424
Tomlinson, R.D., see Zegadi, A. . . . 94 (1994) 429

Townsend, L.W., see Wilson, J.W. 94 (1994) 95
Trikalinos, Ch., N.M. Kabachnik, L.L. Balashova and V.I. Shulga, Influence of channeling on scattering of low-energy antiprotons transmitted through thin crystals 94 (1994) 218
Trinder, W., see Magel, A. 94 (1994) 548
Tripathi, R.K., see Wilson, J.W. 94 (1994) 95
Tupper, M.L., see Spindel, A. 94 (1994) 150

Uda, M., see Nishide, Y. 94 (1994) 271
Uiterlinden, R.M., see Zagwijn, P.M. 94 (1994) 137
Unterricker, S., see Preusse, W. 94 (1994) 569
Unwin, M.E., see Brown, S.D. 94 (1994) 417

Valković, V., see Fazinić, S. 94 (1994) 363
Vámosi, J. and S. Biri, TrapCAD – a tool to design and study magnetic traps of ECR ion sources 94 (1994) 297
van Loef, J.J., see Moolenaar, A.A. 94 (1994) 555
Varichenko, V.S., A.M. Zaitsev, J.K.N. Lindner, R. Domres, N.M. Penina, D.P. Erchak, A.R. Chelyadinskii and V.A. Martinovitsh, EPR, XRD and optical reflectivity studies of radiation damage in silicon after high energy implantation of Ni ions 94 (1994) 240
Varichenko, V.S., A.M. Zaitsev, A.A. Melnikov, W.R. Fahrner, N.M. Kasytchits, N.M. Penina and D.P. Erchak, Defect production in silicon implanted with 13.6 MeV boron ions 94 (1994) 259
Vasil'chenko, V.G., see Antipov, A.V. 94 (1994) 338
Verhoeven, J., A. Keppel, R. Schlatmann, Y. Xue and I.V. Katardjiev, X-ray reflection, a technique for measuring sputtering yields of thin films 94 (1994) 395
Vetterli, D., see Döbeli, M. 94 (1994) 388
von Nagy-Felsobuki, E.I., see Ma, Z. 94 (1994) 197
Voss, B., see Magel, A. 94 (1994) 548
Vrijmoeth, J., see Zagwijn, P.M. 94 (1994) 137

Wahl, M. and A. Wucher, VUV photoionization of sputtered neutral silver clusters 94 (1994) 36
Walker, S.R., see El Bouanani, M. 94 (1994) 530
Wang, Z.G., see Xiong, H.Q. 94 (1994) 475
Watanabe, A., see Sakaguchi, I. 94 (1994) 411
Weber, H.W., see Mathew, K.J. 94 (1994) 449
Weschenfelder, F., see Wienhold, P. 94 (1994) 503
Whang, C.N., see Lee, Y.S. 94 (1994) 66
Whitaker, H.L., see Spindel, A. 94 (1994) 150
Whitlow, H.J., see Martin, J.W. 94 (1994) 277
Whitlow, H.J., see El Bouanani, M. 94 (1994) 530
Wienhold, P., F. Weschenfelder and J. Winter, Colorimetry of interference colours to investigate thickness changes of protective coatings in TEXTOR 94 (1994) 503
Wilson, J.W., J.L. Shinn, L.W. Townsend, R.K. Tripathi, F.F. Badavi and S.Y. Chun, NUCFRG2: a semiempirical nuclear fragmentation model 94 (1994) 95
Winter, J., see Wienhold, P. 94 (1994) 503
Witzmann, A., see Gaiduk, P.I. 94 (1994) 231
Wojciechowski, I.A., see Baltenkov, A.S. 94 (1994) 59
Wollnik, H., see Magel, A. 94 (1994) 548
Wucher, A., see Wahl, M. 94 (1994) 36
Wulff, M., see Als-Nielsen, J. 94 (1994) 348

Xiong, H.Q., Y.F. Hsia, M.D. Hou, S.Y. Zhang, F. Ma, C.L. Li, Y.M. Sun, Y.F. Jin, Z.G. Wang and J.M. Quan, The microstructure changes of CaVSn : YIG induced by energetic carbon ion bombardment 94 (1994) 475
Xue, Y., see Verhoeven, J. 94 (1994) 395

Yakushev, M.V., see Zegadi, A. 94 (1994) 429
Yakushev, V.A., see Komarov, F.F. 94 (1994) 237
Yang, F., see Feng, Y. 94 (1994) 11

Zagwijn, P.M., A.M. Molenbroek, J. Vrijmoeth, G.J. Ruwiel, R.M. Uiterlinden, J. ter Horst, J. ter Beek and J.W.M. Frenken, Two-dimensional position sensitive detection for medium-energy ion scattering 94 (1994) 137
Zaitsev, A.M., see Varichenko, V.S. 94 (1994) 240
Zaitsev, A.M., see Varichenko, V.S. 94 (1994) 259
Zamani, M., see Savvidis, E. 94 (1994) 325
Zaring, C., see El Bouanani, M. 94 (1994) 530
Zecca, A., see Pogrebnjak, A.D. 94 (1994) 81
Zegadi, A., A. Belattar, C.A. Faunce, E. Ahmed, S. Anwar, M.V. Yakushev, M. Imanieh, M.A. Slifkin, A.E. Hill and R.D. Tomlinson, An electron microscope study of near-surface damage caused by Xe and Ne ion implantation in $CuInSe_2$ single crystals 94 (1994) 429
Zentgraf, A., see Gaiduk, P.I. 94 (1994) 231
Zhang, S.Y., see Xiong, H.Q. 94 (1994) 475
Zhao, G., see Feng, Y. 94 (1994) 11
Zhou, Z., see Feng, Y. 94 (1994) 11
Ziesel, J.P., see Benazeth, C. 94 (1994) 581

Nuclear Instruments and Methods in Physics Research B 94 (1994) 615–618

ELSEVIER

NIM B
Beam Interactions with Materials & Atoms

Subject index

Basic Data for Materials Modification and Analysis

New electron multiple scattering distributions for Monte Carlo transport simulation, O. Chibani and J.P. Patau 94 (1994) 1
Cross sections for 165° backscattering of 2.0–9.0 MeV ^{4}He ions from nitrogen, Y. Feng, Z. Zhou, G. Zhao and F. Yang 94 (1994) 11
Charge exchange of atoms with high first ionization potentials in carbon foils at $E \leq 35$ keV/u, M. Gonin, R. Kallenbach and P. Bochsler 94 (1994) 15
Solution of the time dependent Dirac–Fock–Slater equation for many-electron collisions systems using a time window method, P. Kürpick, W.-D. Sepp, H.J. Lüdde and B. Fricke 94 (1994) 183
Energy loss by MeV carbon clusters and fullerene ions in solids (*Letter to the Editor*), K. Baudin, A. Brunelle, M. Chabot, S. Della-Negra, J. Depauw, D. Gardès, P. Håkansson, Y. Le Beyec, A. Billebaud, M. Fallavier, J. Remillieux, J.C. Poizat and J.P. Thomas 94 (1994) 341
On the near surface yield of the ^{1}H(^{15}N,$\alpha\gamma$)^{12}C nuclear reaction and initial charge state equilibration (*Letter to the Editor*), S. Ólafsson, B. Hjörvarsson and F. Stillesjö 94 (1994) 345
L-shell X-ray production cross sections of Tb, Dy, Ho, Er, Tm, Yb, and Lu for protons of energy 2–6 MeV, S. Fazinić, I. Bogdanović, M. Jakšić, I. Orlić and V. Valković 94 (1994) 363
An energy loss straggling formula, D. Novković, K. Subotić, Z. Milošević, S. Manić and M. Stojanović 94 (1994) 369
Relative L-shell X-ray intensities of Pt, Pb and Bi following ionization by 59.54 keV γ-rays, B.B. Dhal and H.C. Padhi 94 (1994) 373

Atomic Collisions in Solids

Monte Carlo calculations of hydrogen and deuterium range distributions in light target materials, M. Mayer and W. Eckstein 94 (1994) 22
Corrections to the image potential for ions, S.P. Apell 94 (1994) 27
VUV photoionization of sputtered neutral silver clusters, M. Wahl and A. Wucher 94 (1994) 36
Methods for measuring mean lifetimes of long lived molecular ions formed in fast collisions, I. Gertner, B. Rosner and I. Ben-Itzhak 94 (1994) 47
Non-additive effects in ion–photon emission, A.S. Baltenkov, V.Kh. Ferleger, M.V. Medvedeva and I.A. Wojciechowski 94 (1994) 59
Molecular dynamics simulations of inelastic energy loss effects in sputtering II, M.H. Shapiro and T.A. Tombrello . . 94 (1994) 186
Kinetic energy distributions of sputtered indium atoms and clusters, Z. Ma, W.F. Calaway, M.J. Pellin and E.I. von Nagy-Felsobuki 94 (1994) 197
Evaluation of the displacement energy of Gd atoms in $GdBa_2Cu_3O_{7-\delta}$ from experimental data, A.A. Makletsov, A.E. Petrov and V.V. Gann 94 (1994) 203
Simultaneous detection of secondary ions and photons produced by the impact of keV polyatomic ions, R.G. Kaercher, E.F. da Silveira, C.V. Barros Leite and E.A. Schweikert 94 (1994) 207
Influence of channeling on scattering of low-energy antiprotons transmitted through thin crystals, Ch. Trikalinos, N.M. Kabachnik, L.L. Balashova and V.I. Shulga 94 (1994) 218
Low-velocity antiproton stopping power. A trial-potential approach, I. Nagy 94 (1994) 377
Optical study of MeV energy heavy ion-induced effects in crystalline germanium and silicon, K.L. Bhatia, P. Singh, M. Singh, N. Kishore, N.C. Mehra and D. Kanjilal 94 (1994) 379
Damage production in Si by MeV carbon cluster irradiation, M. Döbeli, R.M. Ender, U.S. Fischer, M. Suter, H.A. Synal and D. Vetterli 94 (1994) 388
X-ray reflection, a technique for measuring sputtering yields of thin films, J. Verhoeven, A. Keppel, R. Schlatmann, Y. Xue and I.V. Katardjiev 94 (1994) 395
Evaporative processes of sputtered alkali halide cluster ions, V.M. Jarvis, M.R. Hibbs and T.F. Moran 94 (1994) 404

0168-583X/94/$07.00 © 1994 Elsevier Science B.V. All rights reserved

Ion Beam Modification of Materials

Characteristics of polyimide film deposited by ionized cluster beam, Y.S. Lee, K.W. Kim, S.C. Choi, C.E. Hong, I.S. Choi, K. Jeong and C.N. Whang 94 (1994) 66
High resolution electron microscopy study on crystallization of gold-implanted amorphous SiC, H. Mori and T. Sakata 94 (1994) 73
High dose and intense implantation of the multiply charged ions Al^{+n}, Ti^{+n} and C^{+n} into alfa-iron, A.D. Pogrebnjak, O.G. Bakharev, V.A. Martynenko, V.A. Rudenko, R. Brusa, A. Zecca, R. Oechsner, H. Ryssel, I.A. Tikhomirov and A.I. Ryabchikov 94 (1994) 81
Effects of electron-beam and γ-ray irradiation on the magnetic flux of Nd–Fe–B and Sm–Co permanent magnets, S. Okuda, K. Ohashi and N. Kobayashi 94 (1994) 227
Effect of Kr^+-mixing and thermal treatment on Co-silicide formation, P.I. Gaiduk, F.F. Komarov, A. Witzmann, A. Zentgraf and S. Schippel 94 (1994) 231
Super-hard cubic BN layer formation by nitrogen ion implantation, F.F. Komarov, V.V. Pilko, V.A. Yakushev and V.S. Tishkov 94 (1994) 237
Oxygen diffusion in ion-implanted layer of Nb-doped $SrTiO_3$, I. Sakaguchi, H. Haneda, S. Hishita, A. Watanabe and J. Tanaka 94 (1994) 411
Dislocation distributions in ion implanted optical waveguides, S.D. Brown, R.S. Lowther-Harris, P.W. Haycock, J.F. Kelly, P.J. Chandler, P. Barnes and M.E. Unwin 94 (1994) 417

Effects of Radiation

Dating of ancient Egyptian pottery using the thermoluminescence technique, S.A. El-Fiki, M.S. Abdel-Wahab, N. El-Faramawy and M.A. El-Fiki 94 (1994) 91
NUCFRG2: a semiempirical nuclear fragmentation model, J.W. Wilson, J.L. Shinn, L.W. Townsend, R.K. Tripathi, F.F. Badavi and S.Y. Chun 94 (1994) 95
Depth profile of charge deposition by 0.1- to 100-MeV electrons in elemental absorbers, T. Tabata, P. Andreo and R. Ito 94 (1994) 103
Track-hole formation of alpha-particle and recoil nuclei in an LR-115 nuclear track detector exposed to neutrons, A.F. Hafez and G.I. Khalil 94 (1994) 107
Sensitivity of BP-1 glass detectors etched in methanesulfonic acid, Y.D. He and M. Solarz 94 (1994) 113
Semi-empirical systematics of (n,p) reaction excitation functions, A.Yu. Konobeyev and Yu. A.. Korovin 94 (1994) 119
EPR, XRD and optical reflectivity studies of radiation damage in silicon after high energy implantation of Ni ions, V.S. Varichenko, A.M. Zaitsev, J.K.N. Lindner, R. Domres, N.M. Penina, D.P. Erchak, A.R. Chelyadinskii and V.A. Martinovitsh 94 (1994) 240
Exfoliation of GaAs caused by MeV ^1H and ^4He ion implantation at ⟨100⟩, ⟨110⟩ axial and random orientations, E. Rauhala and J. Räisänen 94 (1994) 245
Single charged-particle damage to living cells: a new method based on track-etch detectors, M. Durante, G.F. Grossi, M. Pugliese, L. Manti, M. Nappo and G. Gialanella 94 (1994) 251
Defect production in silicon implanted with 13.6 MeV boron ions, V.S. Varichenko, A.M. Zaitsev, A.A. Melnikov, W.R. Fahrner, N.M. Kasytchits, N.M. Penina and D.P. Erchak 94 (1994) 259
Predicting latent track dimensions, T.A. Tombrello 94 (1994) 424
An electron microscope study of near-surface damage caused by Xe and Ne ion implantation in $CuInSe_2$ single crystals, A. Zegadi, A. Belattar, C.A. Faunce, E. Ahmed, S. Anwar, M.V. Yakushev, M. Imanieh, M.A. Slifkin, A.E. Hill and R.D. Tomlinson 94 (1994) 429
Hyper-thermal neutron irradiation field for neutron capture therapy, Y. Sakurai, T. Kobayashi and K. Kanda 94 (1994) 433
Thermoluminescence dosimetric characteristics of monocrystalline LiF : Mg,Ti (DTG-4), G. Kitis and C. Furetta 94 (1994) 441
Xenon production cross sections at intermediate energies and production rates in small meteoroids based on simulation experiments, K.J. Mathew, M.N. Rao, H.W. Weber, U. Herpers and R. Michel 94 (1994) 449
The microstructure changes of CaVSn : YIG induced by energetic carbon ion bombardment, H.Q. Xiong, Y.F. Hsia, M.D. Hou, S.Y. Zhang, F. Ma, C.L. Li, Y.M. Sun, Y.F. Jin, Z.G. Wang and J.M. Quan 94 (1994) 475
High-energy ionoluminescence of LiF, V.A. Skuratov, A.Yu. Didyk and S.M. Abu Al Azm 94 (1994) 480

Analysis of Materials

An ERD based study of the electromigration of hydrogen in V, Ta, Nb, and Ti, P.R. Berning and R.E. Benenson . . . 94 (1994) 130
Two-dimensional position sensitive detection for medium-energy ion scattering, P.M. Zagwijn, A.M. Molenbroek, J. Vrijmoeth, G.J. Ruwiel, R.M. Uiterlinden, J. ter Horst, J. ter Beek and J.W.M. Frenken 94 (1994) 137

Study of multilayer substrate surface roughness using RBS with improved depth resolution, N.P. Barradas, J.C. Soares, M.F. da Silva, F. Pászti and E. Szilágyi 94 (1994) 266
PIXE-induced XRF analysis for trace amounts of Mn, Cr, V and Ti in low-alloy steels, Y. Nishide, Y. Sasa and M. Uda 94 (1994) 271
Materials characterisation using heavy ion elastic recoil time of flight spectrometry, J.W. Martin, D.D. Cohen, N. Dytlewski, D.B. Garton, H.J. Whitlow and G.J. Russell 94 (1994) 277
Chebyshev approximations for the transmission integral for one single line in Mössbauer spectroscopy, H. Flores-Llamas 94 (1994) 485
Mössbauer concentratometry as a new analytical method, A.L. Kholmetskii, O.V. Misevich, N.M. Abramchuk and S.M. Leshkov 94 (1994) 493
Artificial neural network for identification of a substance from a Mössbauer data bank, E.O.T. Salles, P.A. de Souza Jr. and V.K. Garg 94 (1994) 499
Colorimetry of interference colours to investigate thickness changes of protective coatings in TEXTOR, P. Wienhold, F. Weschenfelder and J. Winter 94 (1994) 503
Method for measuring low activity extensive samples, P.A. Tarela, M.A.J. Mariscotti and E.A. Perone 94 (1994) 511
Neutron capture radiography applied to the investigation of boron-10 biodistribution in animals: improvements in techniques of imaging and quantitative analysis, J.-P. Pignol, J.-C. Abbe, M. Thellier and A. Stampfler 94 (1994) 516
Monte Carlo simulation of ion-beam channeling in $YBa_2Cu_3O_7$, V.A. Khodyrev, V.Ya. Chumanov, K.K. Bourdelle and G.P. Pokhil 94 (1994) 523
Multivariate analysis method for energy calibration and improved mass assignment in recoil spectrometry, M. El Bouanani, M. Hult, L. Persson, E. Swietlicki, M. Andersson, M. Östling, N. Lundberg, C. Zaring, D.D. Cohen, N. Dytlewski, P.N. Johnston, S.R. Walker, I.F. Bubb and H.J. Whitlow 94 (1994) 530
Estimating plutonium buildup from the $^{137}Cs/^{238}U$ ratio for slightly irradiated low enriched uranium, J. Sáfár, I. Almási and L. Lakosi 94 (1994) 537
Time variation of abnormal PIXE yields from some insulating binary metal fluorides under proton bombardment, M. Peisach, C.A. Pineda, A.E. Pillay and K.A. Springhorn 94 (1994) 540
$^{14}N^+$, $^{16}O^+$, and $^{20}Ne^+$ ion beams for studies of charge-induced X-ray yields, A.E. Pillay and M. Peisach 94 (1994) 545
The nuclear encounter probability (*Letter to the Editor*), P.J.M. Smulders 94 (1994) 595

Ion Sources and Beam Optics

Metal ion beams from an ECR ion source using volatile compounds, H. Koivisto, J. Ärje and M. Nurmia 94 (1994) 291
TrapCAD – a tool to design and study magnetic traps of ECR ion sources, J. Vámosi and S. Biri 94 (1994) 297
First spatial isotopic separation of relativistic uranium projectile fragments, A. Magel, H. Geissel, B. Voss, P. Armbruster, T. Aumann, M. Bernas, B. Blank, T. Brohm, H.-G. Clerc, S. Czajkowski, H. Folger, A. Grewe, E. Hanelt, A. Heinz, H. Irnich, M. de Jong, A. Junghans, F. Nickel, M. Pfützner, A. Piechaczek, C. Röhl, C. Scheidenberger, K.-H. Schmidt, W. Schwab, S. Steinhäuser, K. Sümmerer, W. Trinder, H. Wollnik and G. Münzenberg 94 (1994) 548
A magnetically confined hollow cathode duoplasmatron for the PINSTECH ion implanter (*Letter to the Editor*), A. Qayyum and S. Ahmad 94 (1994) 597

Experimental Methods and Equipment

Calibration of dosimeters for the cryogenic irradiation of composite materials using an electron beam, A. Spindel, M.L. Tupper, W.L. McLaughlin, H.L. Whitaker and T. Overett 94 (1994) 150
X-ray microtomography experiments using a diffraction tube and a focusing multilayer-mirror, N. Gurker, R. Nell, W. Backfrieder, J. Kandutsch, K. Sarg, S. Prevrhal and C. Nentwich 94 (1994) 154
Compensation schemes for peak-tailing uncertainties in PIXE spectra, using the GUPIX code, J.A. Maxwell, W.J. Teesdale and J.L. Campbell 94 (1994) 172
Multiple station beamline at an undulator X-ray source, J. Als-Nielsen, A.K. Freund, G. Grübel, J. Linderholm, M. Nielsen, M. Sanchez del Rio and J.P.F. Sellschop 94 (1994) 306
Calibration of a Li-glass detector for neutron energies above 50 keV by the $^1H(t,n)^3He$ reaction, M. Drosg, D.M. Drake and J. Masarik 94 (1994) 319
A passive neutron dosemeter based on a CR-39 track detector with multi-field evaluation, E. Savvidis, W.G. Alberts, M. Luszik-Bhadra and M. Zamani 94 (1994) 325
Toroidal proportional detector for conversion X-ray and transmission Mössbauer spectroscopy, I. Bibicu, M.S. Rogalski and G. Nicolescu 94 (1994) 330
Pile-up and defective pulse rejection by pulse shape discrimination in surface barrier detectors, K.A. Sjöland and P. Kristiansson 94 (1994) 333

Precise densitometer for thin-film dosimeters, A.V. Antipov, G.I. Britvich, V.G. Vasil'chenko and A.A. Chumakov . . 94 (1994) 338
Performance of diamond as X-ray monochromator under very high heat flux in a synchrotron beam (*Letter to the Editor*), J. Als-Nielsen, A.K. Freund, M. Wulff, M. Hanfland and D. Häusermann 94 (1994) 348
The current integrating technique applied to ^{141}Pr Mössbauer spectroscopy, A.A. Moolenaar, P.C.M. Gubbens and J.J. van Loef 94 (1994) 555
Low-temperature system for simultaneous counting of conversion electrons and backscattered γ-rays in Mössbauer effect experiment, T. Ruskov, G. Passage, A. Rastanawi and R. Radev 94 (1994) 565
The contribution of cosmic ray muons to the background spectrum of gamma ray spectrometers, W. Preusse and S. Unterricker 94 (1994) 569
Construction and testing of a multichannel polariser for thermal neutrons, A.F. Schebetov, N.K. Pleshanov, V.M. Pusenkov, B.G. Peskov, G.E. Shmelev, W.H. Kraan, P.T. Por, M.Th. Rekveldt and V.E. Mikhailova 94 (1994) 575
An apparatus for ion–surface collisional process studies and surface analysis, C. Benazeth, P. Benoit-Cattin, P. Cafarelli, P. Reynes, J.P. Ziesel and N. Benazeth 94 (1994) 581
A new method to measure the velocity dependence of electronic stopping for low velocity hydrogen projectiles, D. Semrad, R. Golser and E. Steinbauer 94 (1994) 592

Letters to the Editor

Energy loss by MeV carbon clusters and fullerene ions in solids, K. Baudin, A. Brunelle, M. Chabot, S. Della-Negra, J. Depauw, D. Gardès, P. Håkansson, Y. Le Beyec, A. Billebaud, M. Fallavier, J. Remillieux, J.C. Poizat and J.P. Thomas 94 (1994) 341
On the near surface yield of the ^{1}H(^{15}N,$\alpha\gamma$)^{12}C nuclear reaction and initial charge state equilibration, S. Ólafsson, B. Hjörvarsson and F. Stillesjö 94 (1994) 345
Performance of diamond as X-ray monochromator under very high heat flux in a synchrotron beam, J. Als-Nielsen, A.K. Freund, M. Wulff, M. Hanfland and D. Häusermann 94 (1994) 348
The nuclear encounter probability, P.J.M. Smulders 94 (1994) 595
A magnetically confined hollow cathode duoplasmatron for the PINSTECH ion implanter, A. Qayyum and S. Ahmad . 94 (1994) 597

Book Reviews

Handbook of Ion Implantation Technology, by J.F. Ziegler (Reviewer: E. Johnson) 94 (1994) 351
Fundamental Processes in Sputtering of Atoms and Molecules (SPUT 92) (Reviewer: R.A. Baragiola) 94 (1994) 353